

**Department of Mathematics and Computer Science
Adelphi University
Fall 2015**

0145-160-001	Computer Programming for Non-majors Dr. R. M. Siegfried 212 Post Hall (<i>After the Department moves – 407 Science</i>) (516)877-4482 siegfried@adelphi.edu http://home.adelphi.edu/~siegfried/cs160
Office Hours	Tu 11:00AM – 12:00Noon & 2:00-3:00PM; W 10:00AM-1:00PM; Th 11:00AM – 12:00Noon
Course Description And Purpose	Develop a feel for what programming is like, the process of program development, and major concepts of programming: variables, datatypes, functions, parameters, conditionals, compound datatypes like structures, lists, and arrays, and repeating constructs such as loops and recursion. No programming experience is required.
Gen Ed Learning Goals and Distribution Requirements	Quantitative Reasoning Learning Goal Formal Science Distribution Requirement
Course Learning Goals	Students will write examples for programs write descriptions of the results. Students will use stepwise refinement to create computer programs in a modern programming language. Students will test if their program works correctly by running the program with the examples previously written making sure the results match the descriptions they wrote.
Prerequisites	None
Texts	“Python for Everyone” by Cay S. Horstmann and Rance D. Necaise, Wiley, 2013.
Topics	Getting Started: An Introduction to Programming in Python Decisions, Decisions: Boolean Expressions and Selection Counting Loops Conditional Loops Using Character and String Data Using Library Functions For Basic Calculations Modular Programming : Functions Working with Basic Lists

Assignments

The assignments this semester will require students to use the Python interpreter and IDLE, its interactive programming environment to create, compile and execute programs. This is available on computers on campus, but can be installed on students' own computers if they wish.

While there will be opportunities to use class time for assigned work, this will be more for debugging and other assistance that students require in class than for completing assignments. One should expect to spend 2-4 hours outside class working on programming assignments for this class.

Grading

Each programming assignment will be graded with a base grade of 90%, with points added to reflected areas in which the assignment exceeded specified requirements and/or points deducted to show areas where the assignment is deficient.

Late penalties may be assessed of 2 points per class after the due date.

The final average will be weighted (based on the following ratio:

Programming Assignments	25%
Quizzes	25%
Midterm Exam	25%
Final Exam	25%

The final average will translate to a letter grade according to the following table:

Final Average	Course Grade
A	90 – 100
A-	87.5 – 89.9
B+	83.3 – 87.4
B	80.0 – 83.2
B-	77.5 – 79.9
C+	73.3 – 77.4
C	70.0 – 73.2
C-	67.5 – 69.9
D+	63.3 – 67.4
D	60.0 – 63.2
F	0.0 – 59.9

Attendance

The following is the Adelphi University General Attendance

Policy:

Only students who are registered for courses, and whose name appears on the Official Class Roster may attend courses at the University. Adelphi students make a commitment to be active participants in their educational program; class attendance is an integral part of this commitment. Attendance requirements for each course will be announced by the faculty member at the beginning of each term. Students are expected to be present promptly at the beginning of each class period, unless prevented by illness or by other compelling cause. In the event of such absence, students may request that faculty members be notified by the Office of Academic Services and Retention. Students are responsible for completing course work missed through absences. Students should wait a reasonable length of time for an instructor in the event that the instructor is delayed.

Additionally, you are also responsible for whatever work is covered in class whether or not you are there. Absence from the final exam will be excused only for a good and well-documented reason. The decision to allow a make-up exam will be made in accordance with the policies of Adelphi University.

NB:

I will not be available on Tuesday, September 15, Tuesday, September 29, or Tuesday, October 6. I may also be unavailable on Tuesday, November 3. We will meet on Tuesday, December 8 at our regular meeting time to make up one of these classes; online class presentations will be available to make up for the others. There will be an Open Lab on all but September 15. Attendance will be taken. Students are encouraged to take advantage of the time to complete programming assignments.

If the University is closed for more than two days due to an emergency, go the home page for this course site each day for instructions and assignments. Student instructions materials can be found at <http://home.adelphi.edu/~siegfried/cs160>

Tentative Schedule (Subject to Change)

Date	Topic	Assignment due
September 1	Getting Started: An Introduction to Programming in Python	
September 3	Getting Started: An Introduction to Programming in Python	Assn1 – Running a basic Python Program
September 8	Getting Started: An Introduction to Programming in Python	Assn2 - Converting Kelvin to Celsius and

		then to Fahrenheit
September 10	Decisions, Decisions: Boolean Expressions and Selection	Assn 3 – Converting Pounds to Grams
September 15	Class canceled; to be made up on December 8	
September 17	Decisions, Decisions: Boolean Expressions and Selection	Assn 4 – How many seats are left?
September 22	Quiz: Boolean Expressions and Selection	
September 24	Counting Loops	Assn 5 – Rewriting the payroll program
September 29	Open Lab	
October 2	Counting Loops	Assn 6 – Rewriting the payroll program again to include income tax
October 6	Open Lab	
October 8	Quiz: Conditional Loops	Assn 7 – Finding the batting averages for the starting line-up
October 13	Conditional Loops	Assn 8 - Exponentiation
October 15	Open Lab	
October 20	Review for Midterm Exam	Assn 9 – Helping the bowling league
October 22	Midterm Exam	Assn 10 – Having the computer greet you by name (repeatedly)
October 27	Character and String Data	Assn 11 – Finding whether a number is even or odd
October 29	Character and String Data	Assn 12 – A basic string assignment
November 3	Character and String Data	Assn 13 – A less basic string assignment Assn 14 – A few choice statements manipulating string
November 5	Using Library Functions For Basic Calculations	Assn 15 – An even less basic string assignment
November 10	Using Library Functions For Basic Calculations	Assn 16 – An even less basic string assignment
November 12	Quiz: Library Functions and Basic Calculations	Assn 17 – Calculating cosine and tangent from the sine
November 17	Functions	Assn 18 – Calculating sine with a series
November 19	Functions	Assn 19 – Adding

		methods to the payroll program to give the user instructions
November 24	Functions	Assn 20 - Adding an output function to the payroll program
December 1	Lists	Assn 21 – Rewriting the payroll program to include input functions
December 3	Lists	
December 8	Quiz; Lists	Assn 22 – A Program using Lists
December 10	Review for Final Exam	
December 17	Final Exam (3:30-5:30 PM)	

Students With Disabilities

If you have a disability that may significantly impact your ability to carry out assigned coursework, please contact the Office of Disability Support Services (DSS), located in Room 310 of the University Center, 516-877-3145, dss@adelphi.edu. The staff will review your concerns and determine, with you, appropriate and necessary accommodations. When possible, please allow for a reasonable time frame for requesting ASL Interpreters or Transcription Services; a minimum of four (4) weeks prior to the start of the semester is required.

Honor Code

Students enrolled in this course are expected to abide by the Adelphi University Honor Code. The purpose of the Honor Code is to protect the academic integrity of the University by encouraging consistent ethical behavior in assigned coursework by students. Following is excerpted from the Student Honor Code:

The code of academic honesty prohibits behavior, which can broadly be described as lying, cheating, or stealing. Violations of the code of academic honesty will include, but are not limited to, the following:

1. Fabricating data or citations
2. Collaborating in areas prohibited by the professor
3. Unauthorized multiple submission of work
4. Sabotage of others' work, including library vandalism or manipulation
5. Plagiarism: presenting any work as one's own that is not one's own
6. The creation of unfair advantage
7. The facilitation of dishonesty
8. Tampering with or falsifying records
9. Cheating on examinations through the use of written materials or giving or receiving help in any form during the exam, including talking, signals, electronic devices, etc.

Student Course Evaluations

During the last two weeks of the class, you will receive notification, via mail and eCampus, that the course evaluation is available for your input electronically. Availability will end at the start of the final examination period. Your feedback is valuable and I encourage you to respond. Please be assured that your responses are anonymous and the results

will not be available to the instructor until after the end of the semester and therefore after course grades have been submitted.

Tear off this and return with information required below:

STUDENT ACKNOWLEDGEMENT:

I HAVE RECEIVED AND READ THE SYLLABUS FOR
[INSERT COURSE NUMBER AND SECTION].

SIGNED: _____

PRINT NAME:

DATE: _____

Warning – This page must be signed and returned to the instructor to receive a complete grade in this course.